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Introduction

The Fair Housing Accessibility FIRST program is an initiative designed to promote compliance with the Fair Housing Act design and construction requirements. The program offers comprehensive and detailed instruction programs, useful online web resources, and a toll-free information line for technical guidance and support. This training is part of that program.

Purpose

The purpose of the Fair Housing Accessibility FIRST program is to offer training and technical guidance on accessibility requirements of the Fair Housing Act and to increase the supply of accessible multifamily housing units nationwide. The program provides training and guidance to architects, builders, code officials, and others in the housing industry with the accessibility requirements for designing and constructing dwelling units covered by the Fair Housing Act.

Technical Guidance

The Fair Housing Accessibility FIRST program provides a Design and Construction Resource Center, also known as the DCRC, which is staffed Monday through Friday from 8:00 AM to 5:30 PM Eastern. You can reach the DCRC:

- Toll-free at 888-341-7781
- By emailing FairHousingFirst@hud.gov
- Subscribe via the website for updates from the Fair Housing Accessibility FIRST program.

Additional Training Events

You can register for events on the website by going to:
https://www.hud.gov/program offices/fair housing equal opp/accessibility first training calendar

Please note that both a morning and an afternoon session are offered to accommodate scheduling. Trainings will be posted as they become available.

Notes:				

Learning Objectives

This training includes an introduction and content to help you understand the technical design and construction requirements of the Fair Housing Act for bathrooms.

During this training, we will cover the following topics:

- Topic 1: Requirement 7 Kitchens and Bathrooms
- Topic 2: Bathroom Specifications
- Topic 3: Maneuvering Space
- Topic 4: Clear Floor Space Bathrooms
- Topic 5: Clear Floor Space Bathtub/Showers
- Topic 6: Clear Floor Space Showers

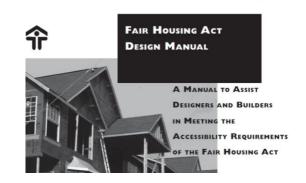
This training relies on the provisions of the Fair Housing Act and its regulations, the Accessibility Guidelines and the Supplemental Questions and Answers, American National Standards Institute (ANSI) A117.1 (1986), and the Design Manual for the guidance that it provides about compliance with the technical design and construction requirements in the Act.

Notes:			

Topic 1: Requirement 7 – Bathrooms

Kitchens and Bathrooms - FHA Design Manual

Kitchens and bathrooms must be designed and constructed so a person in a wheelchair can maneuver about the space and use fixtures and appliances. The guidelines provide specifications for kitchens and baths which, when applied, provide a minimum level of accessibility. This training focuses on the requirements listed within the Fair Housing Act Design Manual, specifically chapter 7. You can find the full design manual within the handouts section of the dashboard.



Usable Bathroom Introduction

The Fair Housing Accessibility Guidelines (the Guidelines) provide specifications for bathroom design that make it possible for people who use mobility aids, and who, heretofore, could not even get into conventional bathrooms in multifamily housing, to now use such facilities. Though not fully accessible, when designed to comply with the Guidelines, these "usable" bathrooms provide a person who uses a wheelchair or scooter or who may use a walker or other mobility aid with a bathroom that has enough maneuvering space to allow the person to enter, close the door, use the fixtures, and exit. In some cases, a resident with a disability will find it necessary to make additional modifications to meet his or her specific needs.



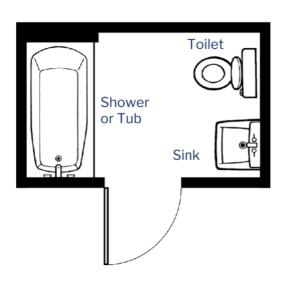
In covered multifamily housing, bathrooms that meet the definition in the Guidelines for a bathroom must then meet the specifications outlined in the Guidelines for usable bathrooms.

Please note that you can find the definitions of the covered multifamily housing on the Fair Housing Accessibility Website under the Frequently asked questions.

Bathroom Definition

The Guidelines distinguish between bathrooms and powder rooms and provide different specifications.

Bathroom is defined as a room which includes a water closet (toilet), lavatory (sink), and bathtub or shower. It does not include single- fixture facilities or those with only a water closet and lavatory. It does include a compartmented bathroom. A compartmented bathroom is one in which the fixtures are distributed among interconnected rooms. A compartmented bathroom is considered a single unit and is subject to the Act's requirements for bathrooms.

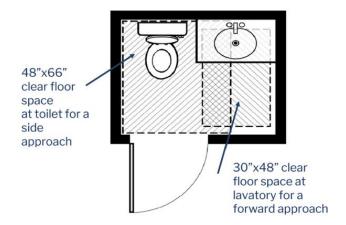


A bathroom has a bathtub or shower, toilet, and sink.

Powder Room Definition

Notes.

Powder Room is defined as. A room with only a water closet (toilet) and lavatory (sink).



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Bathroom Design

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Bathrooms designed to comply with the Fair Housing Act Accessibility Guidelines, also known as the Guidelines, provide a basic level of accessibility for a person using a wheelchair to maneuver about the space, approach and use the fixtures.

Bathrooms designed to comply with the Guidelines do not differ in appearance from conventional bathroom designs typically seen in multi-family housing types.

The specifications in the Guidelines for bathrooms do not provide full accessibility.

For instance, the Guidelines do not require a 60" turning space in bathrooms. The Guidelines also do not require clear floor space under lavatories.

However, the minimum specifications in the Guidelines do require a basic level of accessibility, which, along with residents' rights to make further modifications, achieves significantly more accessibility in bathrooms.



notes:		

Usable Bathrooms

Usable bathroom specifications include:

- An accessible route to and into the bathroom with a nominal 32inch clear door opening (Requirements 3 and 4).
- Switches, outlets, and controls in accessible locations (Requirement 5).
- 3. Reinforced walls to allow for the later installation of grab bars around the toilet, tub, and

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Accessible route to and into the bathroom with 32-inch clear door opening

Requirements 3 & 4

Switches, outlets, and controls in accessible locations

Reinforced walls to allow for grab bars around the toilet, tub, and shower stall; reinforcing must be made in shower stalls to permit the installation of a wall-hung bench seat

Requirement 6

Maneuvering space within the bathroom to permit a person using a mobility aid to enter the room, close and reopen the door, and exit

7

Maneuvering and clear floor space within the bathroom to permit a person graph Requirement 7

shower stall; under certain conditions provisions for reinforcing must be made in shower stalls to permit the installation of a wall-hung bench seat (Requirement 6).

- 4. Maneuvering space within the bathroom to permit a person using a mobility aid to enter the room, close and reopen the door, and exit (Requirement 7).
- Maneuvering and clear floor space within the bathroom to permit a person using a mobility aid to approach and use fixtures; fixture dimensions and placement are specified under certain conditions (Requirement 7).

Notes.			

Usable Powder Rooms

Powder rooms, except as noted below, are only subject to the following specifications:

1. They must be on an accessible route with a nominal 32-inch clear door opening (Requirements 3 and 4).



2. They must have switches, outlets, and controls in accessible locations (Requirement 5).

Usable Bathrooms and Powder Room – Exceptions

There is an exception, however, with respect to multistory dwelling units in buildings with one or more elevators. The level served by the building elevator must be the primary entry level for the dwelling unit and there must be either a usable bathroom or a usable powder room on the entry level. If there is both a bathroom and a powder room, then the bathroom would be required to be usable and meet Requirements 3 through 7 of the Guidelines.

In cases where only a powder room is provided, then it must meet, in addition to Requirements 3, 4, and 5, the applicable provisions of Requirements 6 (Reinforced Bathroom Requirements for Covered Dwelling Units

Specification A - If Specification A is used, it applies to all bathrooms.

Specification B - If Specification B is used, it applies to one bathroom, additional bathrooms in the unit are exempt only from maneuvering and clear floor space requirements at fixtures.

Powder Room Requirements for Covered Dwelling Units

When the powder room is the only toilet facility on the entry level of a multi-story unit in a building, in addition to Requirements 3,4, and 5, meet the reinforcing specifications of Requirement 6 and the maneuvering and clear floor specifications of Requirement 7.

Walls) and 7 (Maneuvering and Clear Floor Spaces) of the Guidelines. The chart on page 7.35 of the Fair Housing Act Design Manual summarizes the requirements for usable bathrooms and usable powder rooms.

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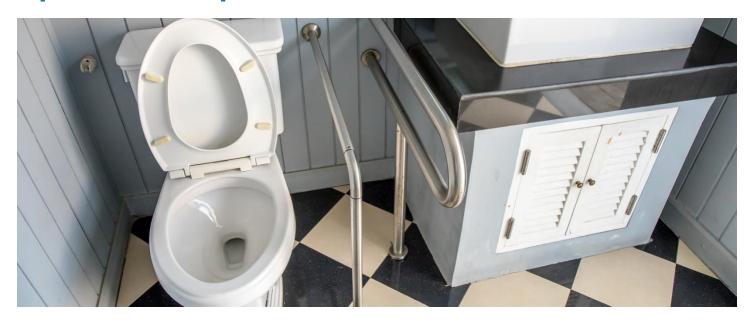
Topic 1: Key Takeaways

- Usable bathrooms and powder rooms in covered multifamily housing must comply with Requirement 7 of the FHA.
- Usable bathrooms and powder rooms must have an accessible route to and into the room with a nominal 32-inch clear door opening.
- Usable bathrooms and powder rooms must also comply with the other requirements of the FHA.



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Topic 2: Bathroom Specifications

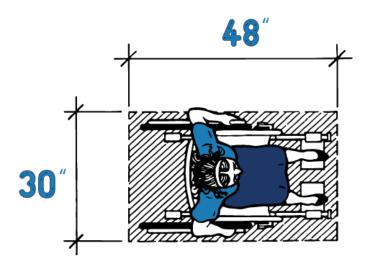


Bathroom Clear Floor Space

In bathrooms, the basic building block of space used in the Guidelines is a 30"x48" clear floor space. This is the standard in ANSI, the 2010 ADA Standards, and other accessibility standards.

A 30"x48" clear floor space is the approximate space occupied by an average size person in a conventional manual wheelchair.

Clear floor spaces for fixtures may overlap. The 30"x48" clear floor space must be positioned for either a parallel or forward approach.



The Guidelines provide bathroom specifications which provide a minimum level of accessibility.

Specifications are provided for:

- 1. Clear floor space within the bathroom for a person using a wheelchair or other mobility aid to position themselves clear of the swing of the door.
- 2. Clear floor space at bathroom fixtures including lavatories, toilets, and showers.





Notes:			

Two Bathroom Specifications

To satisfy the maneuvering and clear floor space requirements for usable bathrooms, Requirement 7 of the Guidelines gives two sets of specifications to design bathrooms. The guide refers to them as Specification A and Specification B. Although not the only difference between the two specifications, a bathroom designed to meet Specification B has greater access to the bathtub than a bathroom designed to meet Specification A.

Some key differences between Specification A and Specification B are:

- Specification A is somewhat less accessible
 which will be discussed later. In Specification A bathrooms, where multiple fixtures are provided, all must
 comply with the clear floor space requirements.
- 2. Specification B provides somewhat more accessibility due to the greater accessibility required at the bathtub. In Specification B bathrooms, where multiple fixture types are provided, only one of each type is required to comply with the clear floor space requirements. For instance, if a "B" bathroom has a tub and a shower, only one must meet the clear floor space requirements. Lastly, the Guidelines provide guidance on how to apply Specifications A and B, to comply with the usable bathroom provisions in Requirement 7.

The two specifications and their differences will be described in the following discussions of maneuvering and clear floor space requirements.

Clear floor space and other maneuvering space requirements discussed in this module allow persons using wheelchairs and other mobility aides to approach and use the fixtures.

Key differences between Specification A and Specification B

Specification A

 Specification A is somewhat less accessible which will be discussed later. In Specification A bathrooms, where multiple fixtures are provided, all must comply with the clear floor space requirements.

Specification B

 Specification B provides somewhat more accessibility due to the greater accessibility required at the bathtub. In Specification B bathrooms, where multiple fixture types are provided, only one of each type is required to comply with the clear floor space requirements.

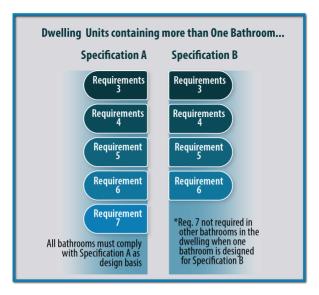
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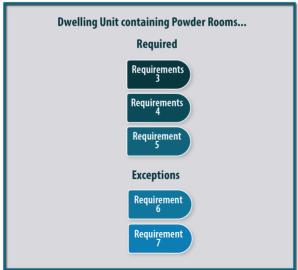
How Many Bathrooms and Fixtures Must Comply With the Guidelines?

In dwelling units containing more than one bathroom, if Specification A is selected as the basis for designing a bathroom, all bathrooms in the dwelling unit also must comply with the A Specifications. If Specification B is selected, only one bathroom in the dwelling unit must meet those requirements; all other bathrooms in the dwelling unit must be on an accessible route (Requirement 4), have doors with a nominal 32-inch clear opening (Requirement 3), have switches, outlets, and controls in accessible locations (Requirement 5), and have reinforced walls around toilets, tubs, and shower stalls (Requirement 6). However, maneuvering space as specified in the Guidelines' Requirement 7 is not required in other bathrooms within the dwelling unit when one bathroom is designed to meet the B Specifications.

However, any powder room provided in a dwelling unit, regardless of which set of specifications the bathroom(s) meets, is still subject to Requirements 3 (Usable Doors), 4 (Accessible Route), and 5 (Controls in Accessible Locations). The exception that requires certain powder rooms also to meet Requirements 6 (Reinforcing) and 7 (Maneuvering and Clear Floor Space) is discussed on page 7.33 of the Fair Housing Act Design Manual.

In bathrooms where several of each type of fixture are provided, e.g., a separate shower and tub or two lavatories, all fixtures must be usable in Specification A bathrooms while only one of each type of fixture must be usable by a person with a disability in a Specification B bathroom.





Example Specification A Bathroom

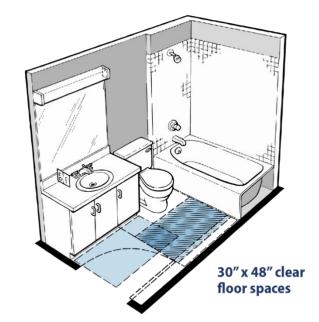
This illustration shows a conventional in-line bathroom design that would comply with Specification "A". The illustrated bathroom is approximately 9 feet 4 inches long by 5 feet 2 inches wide.

This example includes:

- 30-inch by 48-inch clear floor space for parallel approach at the sink and the 48" x 56" clear floor space for perpendicular approach to the toilet.
- 30-inch by 48-inch clear floor space outside wing of door. The toilet beside and close to bathtub allowed in example A bathroom only. This example provides less access to the bathtub and controls.
- · Clear floor space at each fixture.
- Reinforced wall areas for future installation of grab bars around toilet and bathtub.
- Receptacle in required accessible location.
- Fixed base cabinet acceptable since parallel approach centered on basin is possible.

A distinguishing feature of a Specification "A" bathroom is that a toilet (or lavatory) is permitted to be located within the clear floor space adjacent to the bathtub.

In this illustration a toilet is allowed to be positioned next to the bathtub, making access to the bathtub limited.



This conventional in-line bathroom design complies with Specification "A"

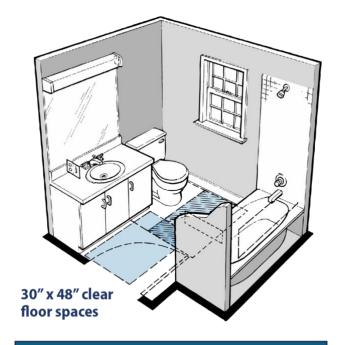
Notes:			

Example Specification B Bathroom

This illustration shows a bathroom design that would comply with Specification "B". The key feature is a 30"x48" clear floor space adjacent to the bathtub. The illustrated bathroom is approximately 6 feet 10 inches long by 7 feet 9 inches wide.

This example includes:

- 30-inch by 48-inch clear floor space outside swing of door required.
- Clear floor space at each fixture.
- Specifically designated clear floor space at bathtub allows greater access to the bathtub and its controls.
- Reinforced wall areas for future installation of grab bars around toilet and bathtub.
- Receptacle in required accessible location.
- Fixed base cabinet acceptable since parallel approach centered on basin is possible.



This bathroom design complies with Specification "B".

Neither a lavatory base cabinet nor a toilet are allowed to encroach on the clear floor space required at the bathtub. Greater access is achieved for people using wheelchairs to transfer into and out of bathtubs.

Notes:			

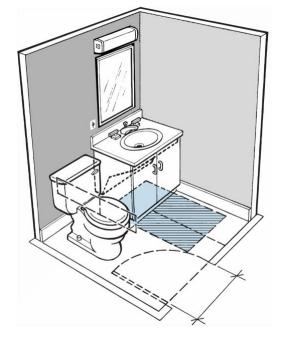
Powder Room

A powder room in a single-story dwelling unit must meet only requirements 3, 4, and 5.

A powder room must meet requirements 3, 4, 5, 6, and 7 when it is the only toilet facility on the entry level of a multistory unit in a building with one or more elevators.

This example of a usable powder room is approximately 5 foot 6 inches long by 5 foot 8 inches wide. It features:

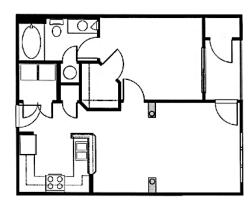
- 48-inch by 66-inch clear floor space at toilet (Requirement 7).
- 30-inch by 48-inch clear floor space at lavatory outside sing of door (Requirement 7).
- Accessible route to enter into the powder room (Requirement
 4).
- Receptacle required in accessible location (Requirement 5).
- Reinforced areas for future installation of grab bars (Requirement 6).
- Removable base cabinet required since close parallel approach center on base is not possible (Requirement 7).



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Design Space – Dwelling Unit with one bathroom

Dwelling units with one bathroom must meet either Specification A or Specification B requirements.





Design Space – Dwelling Unit with multiple bathrooms

Dwelling units with multiple bathrooms have two choices:

All bathrooms can comply with Specification A

OR

• One bathroom complies with specification B and the other bathroom(s) are not required to meet maneuvering and clear floor space requirements.

Notes:			

Clear Floor Space & Approaches

The clear floor space, or CFS, is the minimum unobstructed floor or ground space required to accommodate a single wheelchair and occupant.

When we discuss CFS there are four terms that express the two types of approaches. The first is parallel approach or side approach. Using this approach, you are parallel to the fixture, in other words the fixture is at the side of the wheelchair.

The second is forward approach or perpendicular approach. Using this approach, the wheelchair user is in front or perpendicular to the fixture. Using this approach, the wheelchair user is set at a forward or perpendicular approach to the sink.



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Topic 2: Key Takeaways

Notas:

- In bathrooms, the basic building block of space used in the Guidelines is a 30"x48" clear floor space.
- To satisfy the maneuvering and clear floor space requirements for usable bathrooms, Requirement 7 of the Guidelines gives two sets of specifications to design bathrooms, Specification A and Specification B. Specification A is somewhat less accessible. Specification B provides somewhat more accessibility due to the greater accessibility required at the bathtub.
- Reinforced wall areas for future installation of grab bars around the toilet and bathtub are required for specification A and B bathrooms.
- When we discuss CFS there are four terms that express the two types of approaches. The first is parallel approach or side approach. The second is forward approach or perpendicular approach.



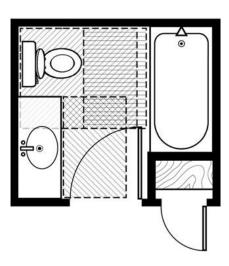
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Topic 3: Maneuvering Space



Maneuvering Space in Bathrooms

The guidelines offer two different wordings for maneuvering space requirements for bathrooms complying with Specification A and Specification B. When applied, the requirements yield almost identical results. Neither Specification requires that the space for a five-foot circular turn or a T-turn (see page 19) be available so a user in a wheelchair would have the space necessary to turn around in the bathroom. However, there are very specific clear floor space requirements that have been adapted from the ANSI A117.1 - 1986 Standard to make it possible for many people with mobility disabilities to be able to use bathrooms designed to meet the requirements of the Guidelines.

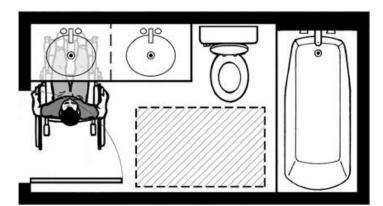


When the maneuvering space requirements of both Specification A and B are analyzed carefully, the primary difference is that a clear floor space must be provided adjacent to the foot of the tub in Specification B bathrooms to increase access to the bathtub and the bathtub controls. To assist in understanding the other differences in the two specifications, this training will describe in detail bathroom elements and features as required by the Guidelines.

Specification A & B Requirements – Swing of Door

Specification A and B bathrooms must have a 30"x48" clear floor space outside the swing of the door. In meeting this requirement doors may swing in or out.

- In bathrooms with out-swinging doors, all the required clear floor space at fixtures must still be provided.
- In bathrooms with in-swinging doors, the door swing may overlap the clear floor space at fixtures but must not overlap the required 30"x48" clear floor space outside the swing of the door.



The bathroom shown here is a Specification A bathroom due to the allowable placement of the toilet which overlaps the clear floor space at the bathtub.

In addition, the user must be able to reopen the door to exit.

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Specifications A & B Requirements - Usable Bathroom Fixtures

Making bathroom fixtures in both Specification A and B bathrooms involves providing certain clear floor space dimensions at each fixture and meeting certain requirements for the shower if the shower is the only bathing facility in the covered dwelling unit.

In addition, Specification B sets additional requirements for bathroom fixtures such as providing clear floor space at the bathtub in a manner that allows greater access to the bathtub and meeting certain specifications on the installation of vanities and lavatories.

The Guidelines contain no requirements for location or type of controls except in Specification B bath- rooms, the controls must be located at the foot of the tub. There generally are no fixture specifications, except size of showers when they are the only bathing fixture in the unit and when knee space must be provided under lavatories. If the bathroom has sufficient space to allow a parallel approach centered on the lavatory, then standard base cabinets may be used below a lavatory. If not, a removable vanity cabinet is required so necessary knee space for a forward approach is available at the lavatory.



Notes.			

Specifications A & B Requirements – Maneuvering Space

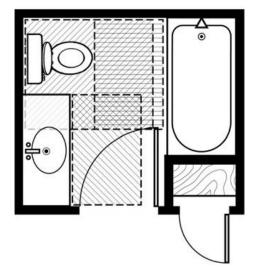
The maneuvering space necessary for usable bathrooms is thus made up of the combination of the designated clear floor spaces at fixtures and the presence of clear floor space outside the swing of the door. Clear floor spaces may overlap each other, and the maneuvering space also may include knee or toe space under lavatories or toilet bowls.

In the example shown here, the space is 7 feet 9 inches wide and 6 feet 10 inches long. The bathroom has the following specifications:

- 30-inch by 48-inch clear floor space parallel to and centered on the basin.
- 30-inch by 48-inch clear floor space for maneuvering outside swing of door.
- Doors may swing into the clear floor space at fixtures, provided there is space to position a wheelchair outside the sing of the door so it can be closed.
- 48-inch by 56-inch clear floor space at the toilet.

Notes.

• This example has a 3-foot-wide accessible route to the bathroom.



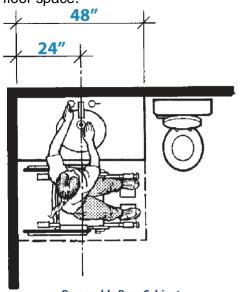
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Specifications A & B Requirements – Lavatories Parallel Approach

If a 30" wide vanity cabinet is used, a 30"x48" clear floor space centered on the sink, a person seated in a wheelchair can approach the sink, use the faucets, and reach into the bowl without excessive twisting or reaching.

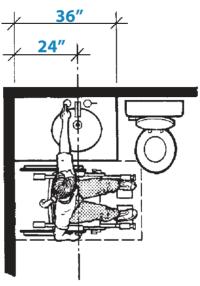
If a 48" vanity cabinet is used, the sink could be centered in the cabinet. The centerline of the lavatory must be 24" from the adjacent wall.

However, if a 36" vanity cabinet is used, the lavatory must be offset in the vanity to achieve a 24" clearance from the adjacent sidewall to the centerline of the sink. In a compact design, where the protruding bowl of an adjacent toilet may extend over the required clear floor space, toe space under the bowl must be maintained to ensure access to the sink. ANSI may be used as a guide: a 9" high toe space may overlap by 6" of the clear floor space.

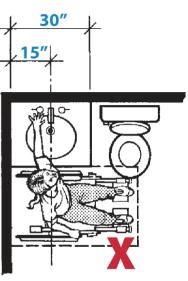


Removable Base Cabinet

Not Required Because Clear Floor Space
Centered on Basin
(Applicable in A and B Bathrooms)



Use of Offset Basin to Reduce Lavatory Length (Applicable in A and B Bathrooms)



Not Acceptable for Parallel Approach Removable Base Cabinet Must Be Provided Because Clear Floor Space Can Not Be Centered (Required in A and B Bathrooms)

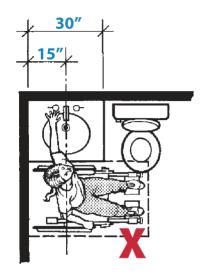
Specifications A & B Requirements – Lavatories – Not Allowed

If a 30" wide vanity cabinet is used, a 30"x48" clear floor space cannot be centered on the sink.

A person using a wheelchair could not approach and pull up close to the basin and faucets. Depending on their approach, their rear wheels or footrest would hit the adjacent sidewall causing them to twist and reach excessively.

A 30" vanity could be used but would be required to have knee space under the sink with a 30"x48" forward approach.

Another solution is to provide a longer vanity base cabinet to allow the centerline of the lavatory to be offset from the adjacent sidewall 24".

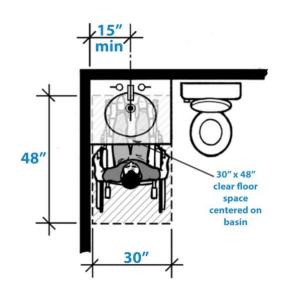


Not Acceptable for Parallel Approach Removable Base Cabinet Must Be Provided Because Clear Floor Space Can Not Be Centered (Required in A and B Bathrooms)

Specifications A & B Requirements - Lavatories Forward Approach

A forward approach is permitted at lavatories. The 30"x48" clear floor space must be perpendicular to the lavatory and extend under the countertop and basin to allow a person in a wheelchair to make a close forward approach to the faucets and basin.

Knee space under the lavatory must be centered on the basin. Knee space may be permanent, or an adaptable cabinet may be installed.



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Specifications A & B Requirements – Knee Space

If a forward approach to the lavatory is provided, the Guidelines provide specifications for knee space in Specification B bathrooms. Knee space dimensions are not provided for Specification A bathrooms.

Guidelines for knee space in Specification A bathrooms may be found in ANSI or other comparable standards, including knee space dimensions found in Specification B bathrooms in the Guidelines.

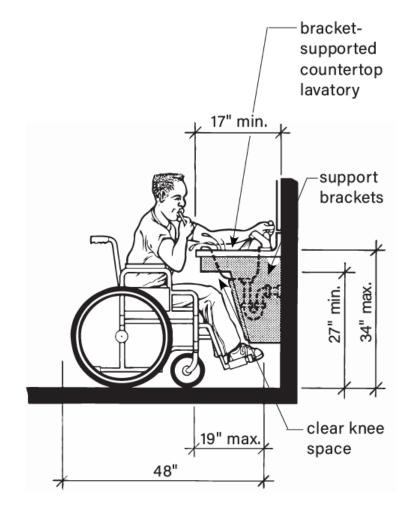
Specification B bathroom dimensions include:

- 34" maximum rim height
- 27" minimum apron height
- 17" minimum depth knee space (19" max.)

Additional key dimensions found in ANSI include:

• 9" high by 6" deep toe space

Pipe protection is not specified in the guidelines but because many people who use wheelchairs have decreased or no sensation in their legs, pipe protection can prevent inadvertent burns from occurring.

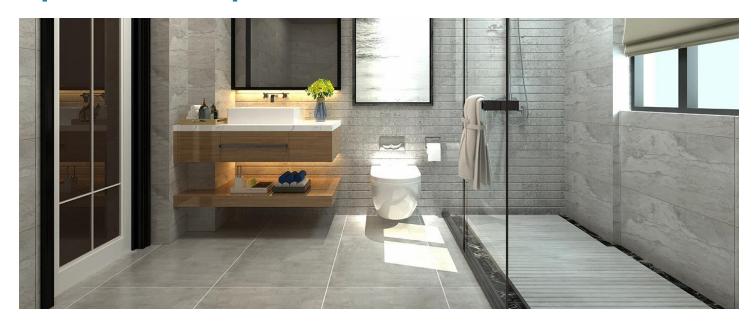


Topic 3: Key Takeaways

- Specification A and B bathrooms must have a 30"x48" clear floor space outside the swing of the door. In meeting this requirement doors may swing in or out.
 - In bathrooms with out-swinging doors, all the required clear floor space at fixtures must still be provided.
 - In bathrooms with in-swinging doors, the door swing may overlap the clear floor space at fixtures but must not overlap the required 30"x48" clear floor space outside the swing of the door.
- When the maneuvering space requirements of both Specification A and B are analyzed carefully, the primary difference is that a clear floor space must be provided adjacent to the foot of the tub in Specification B bathrooms to increase access to the bathtub and the bathtub controls.
- Pipe protection is not specified in the guidelines but because many people who use wheelchairs have decreased or no sensation in their legs, pipe protection can prevent inadvertent burns from occurring.



Topic 4: Clear Floor Space in Bathrooms



Clear Floor Space - Toilets

The clear floor space at toilets varies in size and is larger than the clear floor space for wheelchairs shown at other fixtures. Different amounts of clear floor space must be maintained around a toilet fixture depending upon the direction of approach, either front or side, to allow ease of use by persons using wheelchairs.

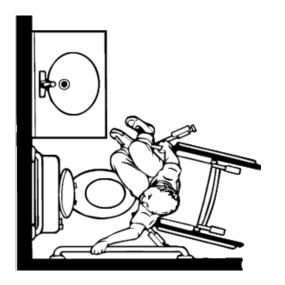
Many people who use wheelchairs are unable to stand while transferring from a wheelchair to the toilet. Some people can transfer to and from the toilet only on one side. Others can complete right, left, or front transfers. The technique used depends on which approach is most familiar, easiest, and safest to complete.

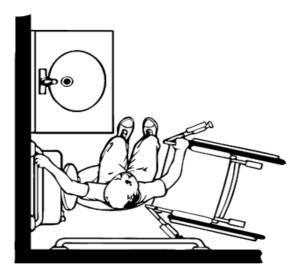
The unobstructed clear floor space required by the guidelines allows a wheelchair user to approach the toilet and transfer onto the fixture using a variety of independent and assisted transfer techniques. The transfer techniques most commonly used are the forward, perpendicular, diagonal, reverse diagonal, and parallel approaches. Whenever possible, it is best to position the toilet to allow forward, perpendicular, and diagonal approaches.

Notes:			

Clear Floor Space - Toilets - Forward Approach

The wheelchair user approaches the toilet, swings the footrest to the side, and pulls the wheelchair close to the toilet to transfer. In this example, both the side and back grab bars are used.

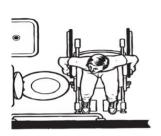




Notes:			

Clear Floor Space - Toilets - Perpendicular Approach

This is an example of the perpendicular approach. The wheelchair user approaches the toilet and **removes the armrest from the wheelchair** to make it easier to slide onto the toilet.



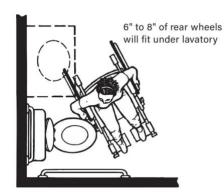


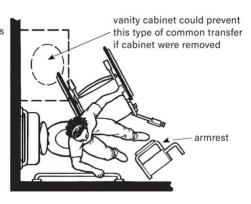
can make a sliding side transfer more easily

Perpendicular Approach (side transfer)

Clear Floor Space - Toilets - Diagonal Approach

This is an example of the diagonal approach. This approach is probably the most frequently used unassisted transfer technique. The wheelchair user removes the armrest and slides to transfer onto the toilet. As you can see in this example, the wheels are next to the sink. A vanity cabinet under the sink could prevent this type of common transfer, however, if the cabinet were removed six to eight inches of the rear wheels could fit under the lavatory.

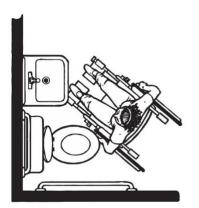


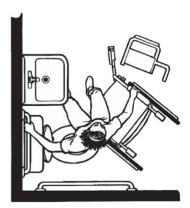


Notes:

Clear Floor Space - Toilets - Reverse Diagonal Approach

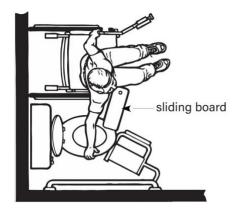
This is an example of the reverse diagonal approach. In the diagonal approach the wheels are under the sink. In the reverse diagonal approach, the wheels are in front of toilet. The wheelchair user would remove the armrest and slide to transfer to the toilet.



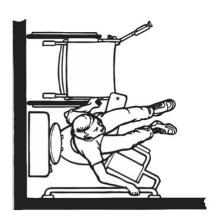


Clear Floor Space – Toilets – Parallel Approach

This is an example of the parallel approach. In this transfer the wheelchair user transfers to the toilet by using a sliding board. In this example, there is at least a 30-inch by 48-inch clear floor space beside the toilet to allow for transfer.





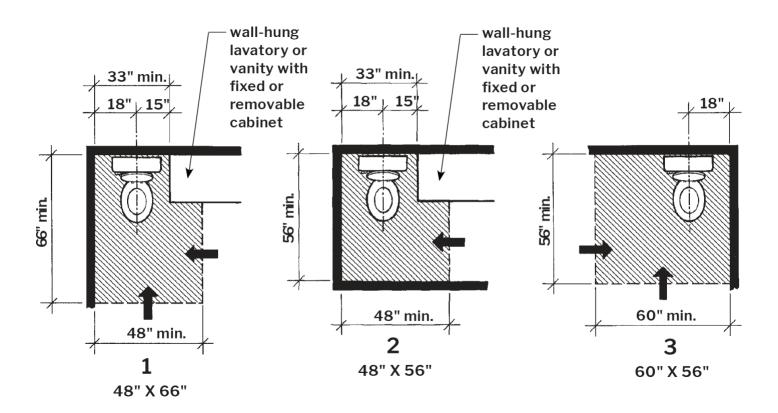


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Clear Floor Space Required in Both Specification A and B Bathrooms

When planning both Specification A and B bathrooms, one of the following three clear floor spaces must be provided at toilets to allow people using wheelchairs and walkers to maneuver, approach the seat, and make a safe transfer onto the toilet. The clear floor space dimensions are to be applied or super imposed over a plan during the design process to determine if space requirements at toilets are being met.



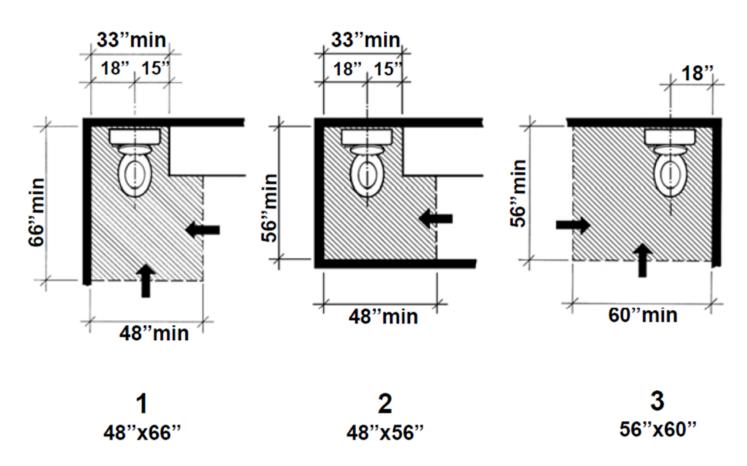
Notes.			

Notes:

Clear Floor Space - Toilets - Specification A and B

For Specification A and B bathrooms, the Guidelines provide three clear floor space options for providing maneuvering space at toilets.

Toilets in Specification A and B bathrooms must comply with one of the clear floor space options provided in the Guidelines. The choice of clear floor space will depend on the overall bathroom design and the direction of approach to the toilet. Provision of clear floor space at toilets is critical to allow people using wheelchairs, or other mobility aides, to approach the seat and make a safe transfer.



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	The	three	options	are:
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- 1. 48"x66" for a forward and side approach
- 2. 48"x56" for a side approach
- 3. 56"x60" fully accessible, for a side or forward approach

These plans illustrate the clear floor space at toilets, the arrows pointing in toward the clear floor space are indicating the direction of approach to the toilet by a person using a wheelchair. In plans one and two, the incomplete box at the right of the toilet may be either a wall-hung lavatory or a countertop lavatory. Depending upon the placement of the other bathroom fixtures and the clearances in that room, any vanity cabinet may be fixed or may be required to be removable.

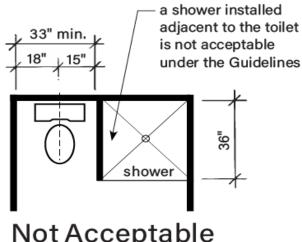
The guidelines allow a countertop lavatory, with either a removable or fixed base cabinet, to be a maximum depth of 24 inches. A wing or privacy wall also may overlap the clear floor space; however, it, too, is restricted to a length of 24 inches and must be at least 33 inches from the opposite wall. In a compartmented bathroom, the 33-inch dimension would have to be increased.

In terms of accessibility and usability of the toilet, from left to right, diagram number one offers a middle level of usability, number two offers the lowest level, and number three, the highest level of usability.

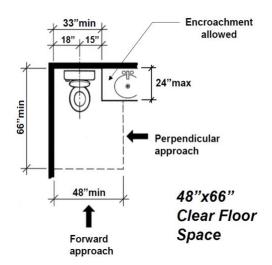
Notes:			

Clear Floor Space - Toilets - Specification A and B Not Acceptable

Some features may overlap the clear floor space at the toilet. A shower installed adjacent to the toilet is not acceptable under the guidelines. From the example of the screen, a shower next to the toilet reduces the acceptable approaches for those in wheelchairs.



Not Acceptable



Clear Floor Space – Toilets – 48-inch by 66-inch

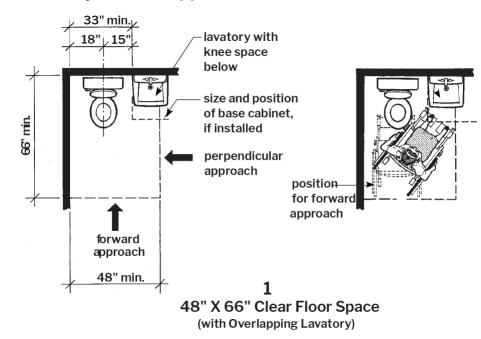
The 48"x66" clear floor space allows both a forward and side (perpendicular) approach to the toilet. If a front approach is provided, there must be enough floor area for a person using a wheelchair to turn and make the approach. If there is a door located in front of the toilet on an opposing wall, there must be a minimum depth of 66" to allow a forward approach.

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Clear Floor Space – Toilets – 48-inch by 66-inch Approaches

To provide space for a forward approach when a lavatory is adjacent to the toilet, the clear floor space must be a minimum of 66 inches long. The door is located opposite the toilet to provide the maneuvering space necessary to execute a froward approach to the toilet.

The user may slide the wheelchair footrests under the toilet bowl or will swing them to either side of the toilet to pull in closer to the bowl to execute a front transfer.



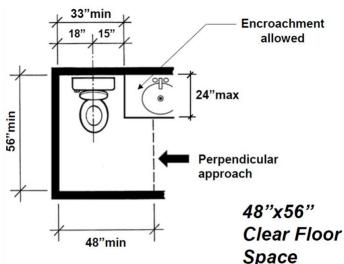
The space for a perpendicular approach is actually wider than in clear floor space number two. An added benefit of the 48-inch by 66 inch clear floor space is that a limited version of the commonly used diagonal approach to the toilet also is possible.

Notes:

Clear Floor Space – Toilets – 48-inch by 56-inch

The 48"x56" clear floor space enclosed on three sides is the minimum space in which a person using a wheelchair can get close enough to make a side or perpendicular approach to the toilet.

As in the 48"x66" option, a lavatory or other obstruction is allowed to overlap the 48"x56" up to a depth of 24". Thirty-three inches, at a minimum, must be maintained between the side of the lavatory and opposing sidewall or bathtub. The centerline of the toilet must be 18" from the adjacent sidewall or bathtub.



The 48"x56" maneuvering space is the least accessible floor area option allowed. A person approaching from a side (perpendicular) approach can pull up to the toilet and make a side transfer to the toilet.

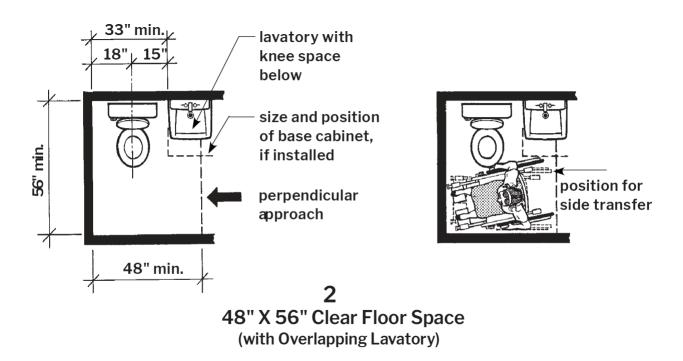
Clear Floor Space – Toilets – 48-inch by 56-inch – Approaches

The 48-inch x 56-inch clear floor space enclosed on three sides is the minimum space in which a person using a wheelchair will be able to get close enough to make a side or perpendicular approach to the toilet. The 48-inch dimension is consistent with the length of the minimum clear floor space for wheelchairs. A person wishing to make a right transfer will approach the toilet head on as shown in the lower right illustration, or depending upon preference, the user may wish to back into the clear floor space to execute a left transfer.

The 56-inch dimension may allow users to angle their wheelchair slightly to execute a safer transfer onto the toilet. This angled position is improved if the lavatory is open below.

Notes:			

Notes:



The Guidelines do not require that this additional maneuvering space be provided for access to toilets, but it can be accomplished with the installation of a lavatory with a removable base cabinet. As much as six to nine inches of the large wheels on a manual wheelchair (somewhat less for power wheelchairs) can be positioned under the lavatory. Removable base cabinets are required in other situations and will be discussed in the next section.

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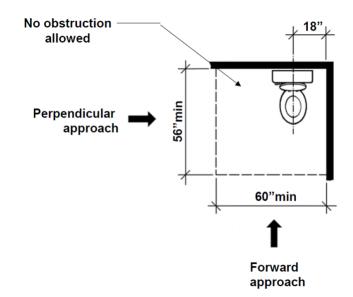
Clear Floor Space - Toilets - 60-inch by 56-inch

The 60"x56" is the most accessible of the clear floor spaces specified in the Guidelines.

Unlike the 48"x66" and 48"x56" options, the clear floor space adjacent to the toilet in the 60"x56" must be clear of any obstructions.

Its shape and size permit a large variety of transfer positions to be assumed by someone using a wheelchair or scooter, including parallel, perpendicular, and diagonal approaches. However, a forward approach is not possible unless the depth of this space is increased to 66". The 60"x56" clear floor space has added value in that it has sufficient space so someone could assist a person using a wheelchair in making a transfer.

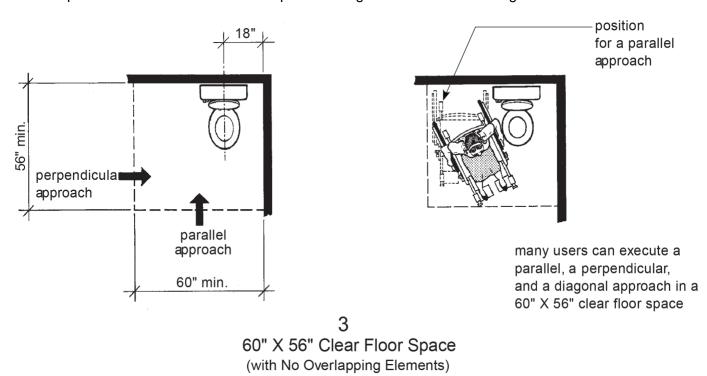
Notes:



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Clear Floor Space – Toilets – 60-inch by 56-inch Approaches

This clear floor space, minus the lavatory, is the same length as at toilet clear floor space number two, but its width is increased by 12 inches. Its shape and size permit a large variety of transfer positions to be assumed by someone using a wheelchair or scooter, including parallel, perpendicular, and diagonal approaches. However, a forward approach as shown at clear floor space number one is not possible unless the depth of this space is increased to 66 inches. The 60-inch x 56inch clear floor space has added value in that it has sufficient space so someone could assist a person using a wheelchair in making a transfer.



Notes.		

Clear Floor Space – Lavatories

Both Specification A and B bathrooms allow the 30"x48" clear floor space to be positioned for a forward approach to the lavatory sink if knee space is provided.

If permanent knee space is not desired, an alternate is to provide an adaptable cabinet.

If an adaptable cabinet is provided, the accessible version must be equal in quality of finishes to the conventional version. Floor finishes must extend under the cabinet, ends of adjacent cabinets must be finished, and walls under the sink must be finished.



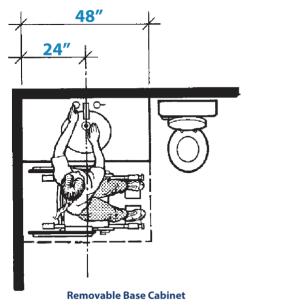
In this photo the use of appearance panels to conceal the underside of the sink, although not required, prevents inadvertent burns to the limbs of people with decreased sensation.

Clear Floor Space – Lavatories

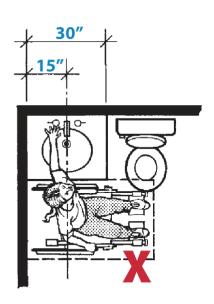
A 30-inch x 48-inch clear floor space is required at the lavatory so a person who uses a wheelchair or scooter can get close enough to the basin and controls to use the fixture. When knee space is not provided for a forward approach, this 30-inch x 48-inch clear floor space must be parallel to the cabinet or counter front and centered on the basin.

Either a countertop lavatory with a vanity cabinet or a wall-hung lavatory may be installed in Specification A and B bathrooms. There are no specifications for control location or type nor for drain location. The lavatory type and width, plus the available maneuvering space in the room, determine whether a vanity cabinet must be removable.

Notes:			



36" **Use of Offset Basin to**



Not Required Because Clear Floor Space Centered on Basin (Applicable in A and B Bathrooms)

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Reduce Lavatory Length (Applicable in A and B Bathrooms)

Not Acceptable for Parallel Approach Removable Base Cabinet Must Be Provided Because Clear Floor Space Can Not Be Centered (Required in A and B Bathrooms)

Clear Floor Space – Lavatories – Offset Basin

To economize on floor space, the basin may be offset so the length of the countertop may be less than 48 inches. In 36-inch-wide countertops, the basin may be offset provided it remains centered on the required 48inch-long clear floor space.

If a lavatory must be installed where space does not permit a close parallel approach with the 30-inch x 48-inch clear floor space centered on the basin, the centerline of the basin must be at least 15 inches from an adjoining wall or fixture. It must have knee space at least 30 inches wide to allow a user to execute a forward approach into clear floor space beneath the fixture.

Notes.			

Notes:

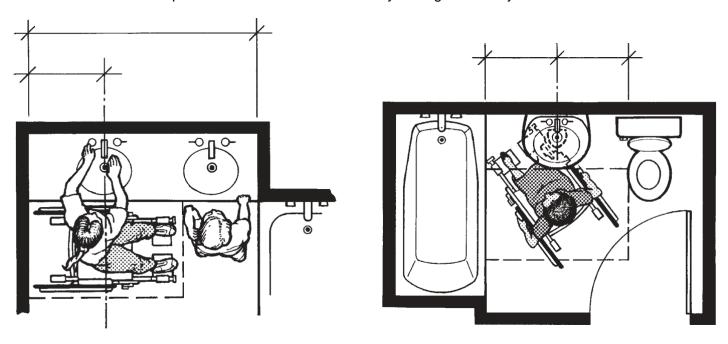
Clear Floor Space - Lavatories - Knee Space

Knee space must be provided below narrow lavatories lacking this parallel and centered approach, because, if not, the user must make an awkward and often impossible, painful twisting motion over the side of the wheelchair to reach the faucet handle that is positioned somewhat behind one shoulder. In addition, it is difficult from this position to wash both hands, lean over the basin to clean teeth, etc.



Clear Floor Space - Lavatories - Double Basin and Pedestal Lavatories

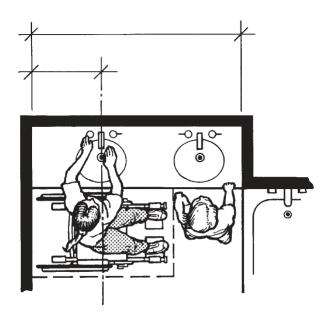
It is also possible to install double basin lavatories and pedestal lavatories so they meet the requirements of the Guidelines. Countertops for double basin lavatories vary in length and may be as short as 60 inches.

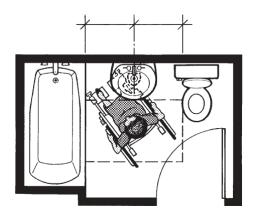


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Clear Floor Space – Lavatories – Double Basin

Where two basins are planned for installation in a 60-inchlong countertop, and especially where obstructions such as a wall and bathtub (as shown in the illustration at right) enclose the available maneuvering space, a forward approach with a removable vanity cabinet should be used. However, in this illustration the countertop is 72 inches long and the person using a wheelchair can be parallel and centered on the basin.





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Clear Floor Space – Lavatories – Pedestal Lavatories

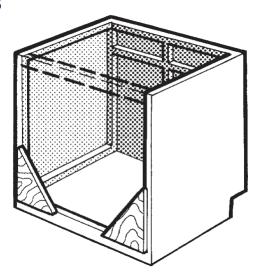
Pedestal lavatories are manufactured with a variety of pedestal widths and depths. They can be installed in bathrooms covered by the Guidelines, provided a parallel approach centered on the basin can be made. Giving the appearance of having knee space, unlike a removable base cabinet where the knee space can be constructed to specific design parameters, pedestal lavatories have no removable element.

As they are currently manufactured, most pedestal lavatories do not provide adequate knee space to allow a user to make a head-on or forward approach. If pedestal lavatories are installed with the 30-inch x 48-inch clear floor space centered on the basin, a user may execute a variety of approaches. Angled approaches are possible provided adjacent fixtures do not interfere.

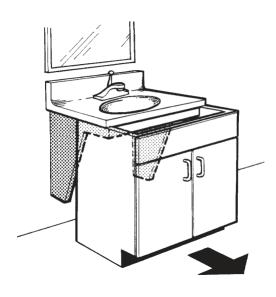
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Clear Floor Space – Modified Removable Vanity Cabinets

Knee spaces are particularly important in bathrooms that are small and have limited maneuvering space. It is especially critical where a close parallel and centered approach cannot be provided at the lavatory basin. When knee space is necessary for a bathroom to be usable, that space must be provided at the time of initial construction. However, it may be concealed by a vanity cabinet that, when removed, will expose knee space. When the cabinet is in place a more common appearance is maintained and storage is provided. As in kitchens, finishes on the floor and walls in the knee space must be installed during initial construction so no additional finish work is required when the vanity cabinet is removed.



Clear Floor Space - Removable Vanity Cabinets



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When a removable vanity cabinet is installed, the countertop and lavatory can be supported by wall-mounted brackets that fit inside the cabinet. These brackets are hidden when the base cabinet is in place; once the cabinet is removed, the brackets are exposed.

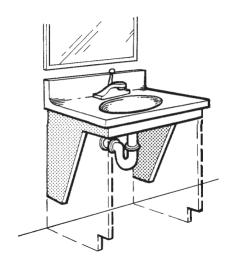
With growing demand, some of the commercial manufacturers are beginning to produce prototypes that should result, in the near future, in mass marketed lavatories with removable base cabinets.

Standard vanity cabinets may be modified and used as removable cabinets. The cabinet back or back supports may need to be cut down to clear the support system and to provide clearance for water lines, valves, and drain pipes. If the back of the cabinet is removed or significantly modified, the sides may have to be reinforced.

Notes:	

Clear Floor Space - Vanity Cabinet Brackets

Any brackets used to support countertop lavatories should not interfere with maneuvering space within the bathroom; this is especially critical in small bathrooms where maneuvering space is at a minimum. The angled bracket shown in this series of illustrations is held away from the floor and is based on the ANSI knee space requirements. Use of a similarly designed bracket is strongly recommended.





Notes:

Clear Floor Space - Vanity Cabinet Supports

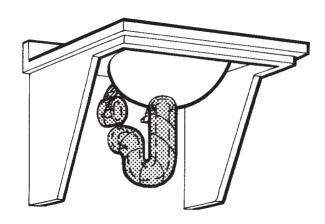
Supports that are the full depth of the counter that go to the floor are discouraged at narrow lavatories but are acceptable for wider lavatories where it is assumed that more floor area will be available for maneuvering. Where supports extend to the floor, at least 30 inches must be provided between them to allow maneuvering space for a forward approach to the lavatory. This may require that some vanity cabinets be wider than 30 inches, so when the cabinet is removed and the concealed supports are exposed, 30 inches is provided between them.

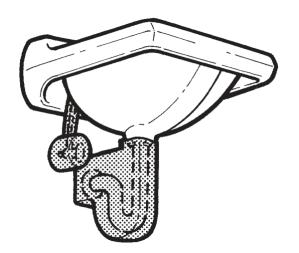
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Clear Floor Space – Vanity Cabinet – Pipe Protection

Plumbing below the lavatory should be covered to prevent burns and abrasions. This can be done by using removable insulation to cover the hot water pipe and the drain, or by adding a fixed, one-piece cover.

The most economical method of providing protection from hot pipes and sharp surfaces is to wrap them with insulation. Although this solution is effective, it is often difficult to maintain the insulation; it may be removed when repairs are made and either is difficult to rewrap due to loss of adhesion or is not replaced at all.





Notes:

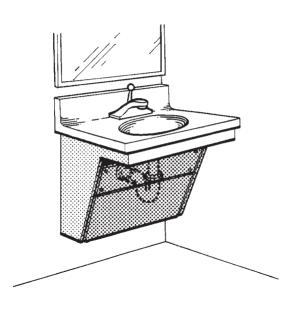
Clear Floor Space – Vanity Cabinet – Pipe Cover

A reasonably priced aesthetic and functional improvement is possible with the installation of a commercially available or custom-made pipe cover. These pipe covers should be designed and installed so they are easy to remove and replace when the drain tap or valves need repair.

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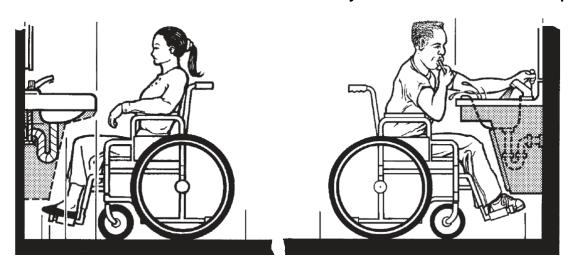
Clear Floor Space – Vanity Cabinet – Appearance and Protection Panel

For countertop lavatories, an appearance and protection panel that covers the water pipes and drain can be mounted directly to the support brackets. Such a panel can be removed easily to service pipes, and unlike wrapped insulation, retains a more aesthetically pleasing appearance. It is recommended that the insulation or protection be installed at the time of construction. The shape of the knee space influences the design of any pipe protection method.



Clear Floor Space – Knee Space Design

Knee space dimensions are specifically delineated in the guidelines for lavatories in Specification B bathrooms. However, in Specification A bathrooms, "if parallel approach is not possible within the space, **any cabinets provided would have to be removable to afford the necessary knee clearance for forward approach.**



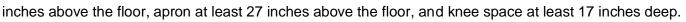
Notes:			

Clear Floor Space - Knee Space Design - Specification A

In Specification A bathrooms, knee space must be at least 17 inches deep, but only 19 of the 48 inches of clear floor space required for the perpendicular approach may extend under the lavatory. While the Guidelines do not provide further specifications for knee space, it is recommended that ANSI A117.1 be followed.

Clear Floor Space – Knee Space Design – Specification B

The specific requirements given in the Guidelines for knee space in Specification B Bathrooms include: centerline of the fixture at least 15 inches from an adjoining wall or fixture, top of fixture rim a maximum of 34 inches above the flags and the state of the sta





In both ANSI and the Specification B bathroom requirements, only 19 inches of the 30inch x 48-inch clear floor space may extend under a lavatory. Seventeen inches is the minimum depth allowed for either a wall-hung or a countertop lavatory. This ensures that the basin extends sufficiently so a wheelchair user's feet do not strike the wall on which the fixture is mounted before his or her torso is close enough to the front of the lavatory to be able to reach the controls and use the basin.

The dimensions given in the Guidelines for Specification B bathrooms are consistent with those found in the ANSI Standard. They do not completely define the shape of the knee space, and it is recommended that builders/developers follow the ANSI Standard when knee space must be provided in either Specification A or Specification B bathrooms.

Notes:			

Topic 4: Key Takeaways

- Toilets in Specification A and B bathrooms must comply with one of the clear floor space options provided in the Guidelines. The choice of clear floor space will depend on the overall bathroom design and the direction of approach to the toilet. Provision of clear floor space at toilets is critical to allow people using wheelchairs, or other mobility aides, to approach the seat and make a safe transfer.
- The three options are:

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- o 48"x66" for a forward and side approach
- o 48"x56" for a side approach
- o 56"x60" fully accessible, for a side or forward approach
- The 48"x66" clear floor space allows both a forward and side (perpendicular) approach to the toilet.
- The 48"x56" clear floor space enclosed on three sides is the minimum space in which a person using a wheelchair will be able to get close enough to make a side or perpendicular approach to the toilet. The 48"x56" maneuvering space is the least accessible floor area option allowed.



 The 60"x56" is the most accessible of the clear floor spaces specified in the Guidelines. The 60"x56" clear floor space has added value in that it has sufficient space so someone could assist a person using a wheelchair in making a transfer.

Topic 4: Key Takeaways (continued)

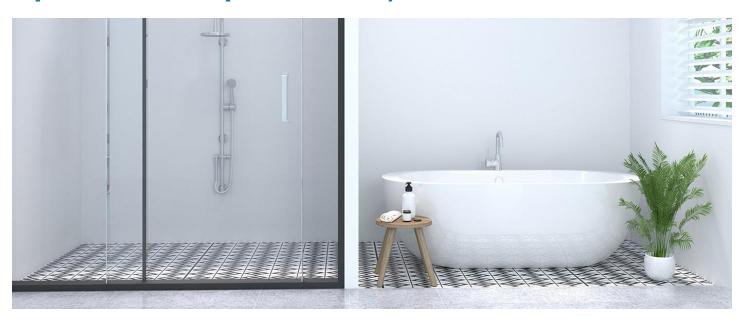
- A 30-inch x 48-inch clear floor space is required at the lavatory so a person who
 uses a wheelchair or scooter can get close enough to the basin and controls to use
 the fixture. When knee space is not provided for a forward approach, this 30-inch x
 48-inch clear floor space must be parallel to the cabinet or counter front and
 centered on the basin.
- Knee space dimensions are specifically delineated in the guidelines for lavatories in Specification B bathrooms. However, in Specification A bathrooms, "if parallel approach is not possible within the space, any cabinets provided would have to be removable to afford the necessary knee clearance for forward approach.



Notes:	

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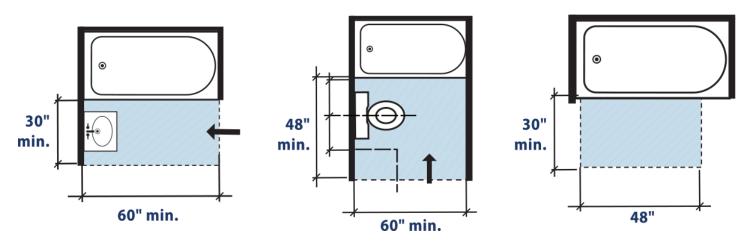
Topic 5: Clear Floor Space – Bathtubs/Showers



The Guidelines require that one of three different clear floor spaces be provided at bathtubs so people who use wheelchairs or scooters can get close enough to execute transfers into and out of bathtubs. The diagrams below, taken from the Guidelines, show the clear floor space requirements for bathtubs; numbers one and two apply to Specification A bathrooms and number three to Specification B bathrooms.

Notes.			

In all three clear floor spaces, the shaded areas must remain clear, except that in clear floor space diagram number 2, a lavatory that meets all applicable clear floor space requirements for lavatories may be located next to the toilet. In Specification A bathrooms, either a lavatory or a toilet may encroach upon the clear floor space next to the bathtub.



Notes:			

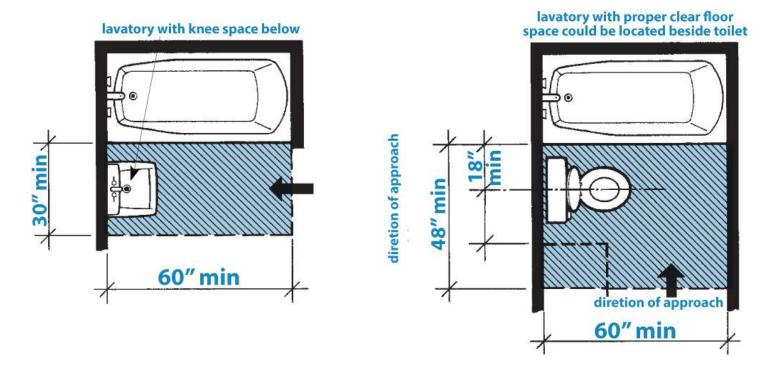
Notes:

Clear Floor Space - Bathtubs/Showers - Specification A

For Specification A bathrooms, two clear floor specifications are provided for combination bathtub/shower fixtures.

A 30"x60" clear floor space with a wall hung lavatory is provided for a parallel approach at the bathtub. In the illustration, note the lavatory must have clear floor space for a forward approach. This may be accomplished by providing a wall hung sink, or a countertop lavatory with an adaptable cabinet.

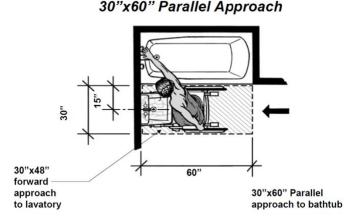
The second floor space provided is a 48"x60" clear floor space which allows a perpendicular approach to the bathtub.



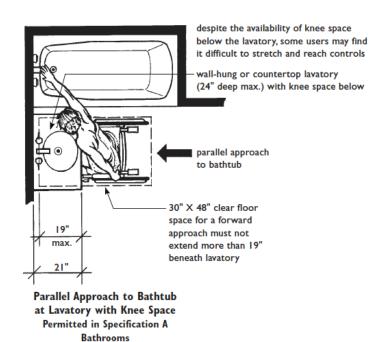
Clear Floor Space – Bathtubs/Showers – Specification A – Parallel Approach at Lavatory

If the 30"x60" parallel approach clear floor space is provided, a lavatory may overhang but must be a wall-hung fixture or an easily adaptable cabinet.

The centerline of the lavatory must be a minimum of 15" from the face of the adjacent bathtub. The only permissible overlapping element is a 17" to 19" wall-



hung lavatory with knee space below. Despite the availability of the knee space below the lavatory, some users may find it difficult to reach controls.



Clear Floor Space – Bathtubs/Showers – Specification A – Parallel Approach to Bathtub at Lavatory with Knee Space

If a countertop lavatory with a vanity cabinet is located adjacent to the bathtub, a person using a wheelchair must be able to execute a close parallel approach centered on the basin. If the lavatory does not afford a full parallel approach to the basin, knee space and clear floor space for a forward approach are required, and any cabinets would have to be removable.

However, despite the availability of knee space below the lavatory, some users may find it difficult to stretch and reach controls.

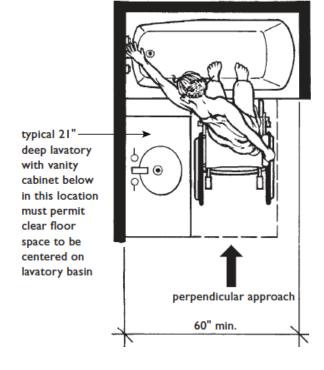
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Clear Floor Space – Bathtubs/Showers – Specification A – Perpendicular Approach at Vanity Cabinet

When the lavatory with vanity is adjacent to a bathtub, **reach** to the controls is possible only from a perpendicular approach which may be difficult for some wheelchair users. To improve access to controls, a resident who uses a wheelchair could have a new vanity with knee space installed or have controls repositioned closer to the tub rim.

When a lavatory with vanity cabinet is adjacent to tub, a person using in a wheelchair must make a perpendicular approach to the tub rim to be sufficiently close to operate the controls. The user will have 60 inches minimum to perform a perpendicular approach to remove footrests, place feet in tub, and execute a stretch which may be difficult for some people.

A typical 21" deep lavatory with vanity cabinet below in this location must permit clear floor space to be centered on lavatory basin.



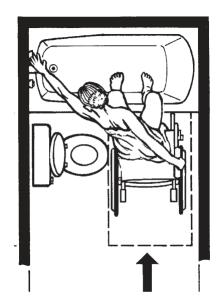
Notes:

Clear Floor Space – Bathtubs/Showers – Specification A – Perpendicular Approach to Bathtub at Toilet

In Specification A bathrooms, the Guidelines also allow a toilet to occupy the space next to the bathtub. Toilets typically protrude into the room farther than vanity cabinets, making it necessary for a person using a wheelchair operate tub controls.

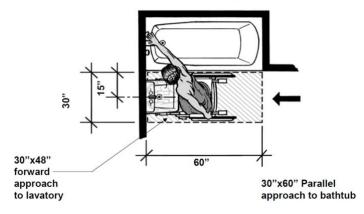
The approach by a person using a wheelchair is perpendicular to the bathtub. This arrangement of fixtures also makes it difficult to reach the controls, but reach can be improved if users can remove their footrests and position their feet in the tub to get closer to the tub rim.

A second option for some users is to transfer onto the toilet to reach the controls. The user then must transfer back into his or her wheelchair and maneuver to get sufficiently close to the bathtub rim to make a transfer down into the bathtub. Other users may add a bathtub seat that allows them to remain at the height of the tub rim while bathing. Transfers back into a wheelchair may be easier from a tub seat rather than from the floor of the



bathtub, but this option does not allow the user to be immersed in water for a soaking bath.

30"x60" Parallel Approach



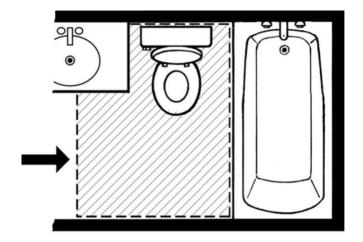
In Specification A bathrooms, the Guidelines also provide a 48"x60" clear floor space at bathtubs for a perpendicular approach.

A toilet or lavatory is allowed to overlap in the 48"x60" space.

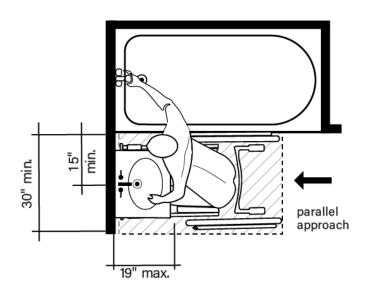
Notes:

The 48"x60" clear floor space perpendicular approach to the bathtub, with the allowed toilet and lavatory obstructions, is the least accessible clear floor space at bathtubs permitted by the Guidelines. A minimum of 30" clearance must be maintained between the rim of toilet and opposing wall to allow a forward approach.

This arrangement of fixtures makes it difficult for a person in a wheelchair to reach the controls and transfer into the tub.



Clear Floor Space - Bathtubs/Showers - Specification B



In Specification B bathrooms, a 30-inch by 48-inch clear floor space is required adjacent to the bathtub to provide greater access for transferring into and out of the bathtub. The controls must be on the wall at the foot of the bathtub. The edge of the clear floor space should be flush with the control wall surface.

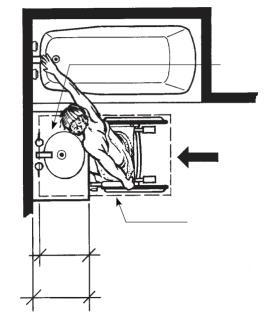
Neither a vanity cabinet nor a toilet may encroach on this clear floor space. However, a wall-hung lavatory with a depth of 17 to 19 inches and with knee space below is the only fixture that may overlap the clear floor space at bathtubs in Specification B bathrooms. A lavatory that is deeper than 19 inches only may be installed if it is recessed into the wall to allow the edge of the 30-inch x 48-inch.

Notes:	

Clear Floor Space - Bathtubs/Showers - Specification B - Parallel Approach

The main difference between A and B bathrooms is that Specification B bathrooms must have a 30"x48" clear floor space parallel to and adjacent to the bathtubs, beginning at the control wall. Unlike Specification A, encroachments are limited to a small wall-hung lavatory. If provided, the lavatory must be no more than 19" in depth with knee space. This design provides greater access for transfers into and out of the bathtub.

In B bathrooms, if there are both a tub and shower, only one has to be accessible and meet maneuvering space requirements of the Guidelines.



Notes:				

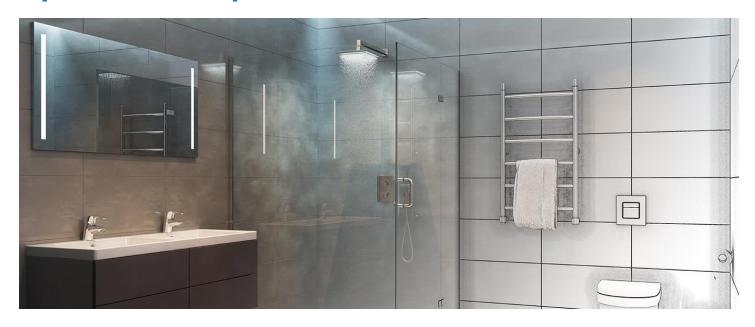
Topic 5: Key Takeaways

- The Guidelines require that one of three different clear floor spaces be provided at bathtubs so people who use wheelchairs or scooters can get close enough to execute transfers into and out of bathtubs.
- For Specification A bathrooms, two clear floor specifications are provided for combination bathtub/shower fixtures:
 - A 30"x60" clear floor space with a wall hung lavatory is provided for a parallel approach at the bathtub.
 - The second floor space provided is a 48"x60" clear floor space which allows a perpendicular approach to the bathtub.
- In Specification B bathrooms, a 30-inch by 48-inch clear floor space is required adjacent to the bathtub to provide greater access for transferring into and out of the bathtub.
- The main difference between A and B bathrooms is that Specification B bathrooms must have a 30"x48" clear floor space parallel to and adjacent to the bathtubs, beginning at the control wall.



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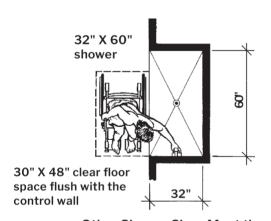
Topic 6: Clear Floor Space - Showers



Clear Floor Space - Showers - General Requirements

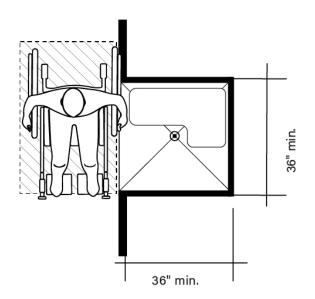
Shower stalls in covered dwelling units may be of any size or configuration and are not limited to the 36-inch by 36-inch stall shown in the image on the screen, which has been taken from the Guidelines. This image illustrates clear floor space requirements for showers. An exception regarding minimum stall size is made when a shower stall is the only bathing fixture in the covered dwelling unit.

A 30-inch by 48-inch clear floor space must be provided at shower stalls, parallel to the fixture and flush with the control wall. In 36-inch x 36-inch showers, the clear floor space must be positioned exactly as shown in the upper right diagram, with



Other Shower Sizes Meet the Requirements of the Guidelines

Notes:



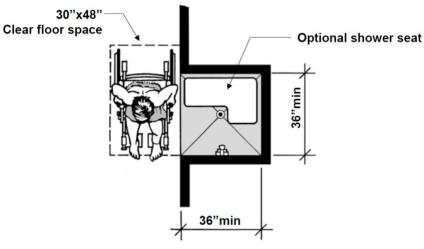
12 inches offset behind the wall opposite the control wall. The Guidelines require this clear floor space beside the shower fixture primarily to ensure that adequate maneuvering space is available outside the stall for a person using a mobility aid to get sufficiently close to enter and exit the stall safely.

The 36-inch x 48-inch shower in the center is generally not intended for use with a wall hung bench seat because a user seated on the bench could not reach the controls. However, because some users may elect to add their own seat, an additional 12 inches of clear floor space is recommended, as well as reinforcing for such a seat is recommended.

Clear Floor Space - Showers - Exceptions

Shower stalls may be of any size or configuration except when:

- 1. The shower stall is the only bathing fixture in the dwelling; or
- 2. When the shower stall is designated the accessible bathing fixture in a Specification B bathroom.
- The shower is the only bathing fixture in a Specification A or B bathroom on the primary entry level of a covered multistory unit located in an elevator building.



Notes:

In these exceptions, for a Specification A bathroom, the Guidelines specify that the shower stall measure at least 36" x 36" or a comparable size that provides at least the same equivalent usable size. In a Specification B bathroom, the Guidelines specify that the shower stall measure a nominal 36" by 36". In both A and B bathrooms, a shower stall would comply if the interior of the stall compartment measures no less than 35 ½" by 35 ½". It must have a 30"x48" clear floor space parallel to the stall and flush with the control wall. This alignment provides 12" clear floor space offset behind the wall opposite the controls. The shower wall opposite the controls must be reinforced to allow for installation of a wall-hung seat.

Clear Floor Space - Showers - Specification A

In Specification A bathrooms, where all fixtures must meet the Guidelines, if the room is equipped with both a bathtub and a separate shower, **both fixtures must be provided with the required clear floor space.**

Clear Floor Space – Showers – Specification B

In Specification B bathrooms, only one bathing fixture must be provided with the required clear floor space. All shower stalls must have reinforced walls for later installation of grab bars (see Chapter 6). The Guidelines contain no specifications that limit the curb height, nor do they address control type or location.

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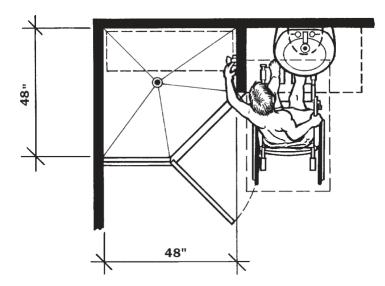
Notes.			

Clear Floor Space - Showers - Glass Shower Stall

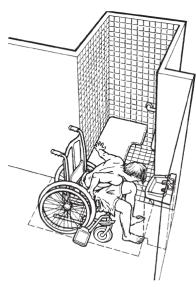
Glass shower stalls with the following features may work well for many people who use wheelchairs:

- Clear floor space goes under the lavatory 12 inches.
- Pedestal or countertop lavatory with removable vanity so user can pull up close to shower to reach controls.

It is preferred but not required that the location controls be reachable from the outside of the stall as well as from the bench seat.



Clear Floor Space - Showers - Fixture Overlap - 36 inches long



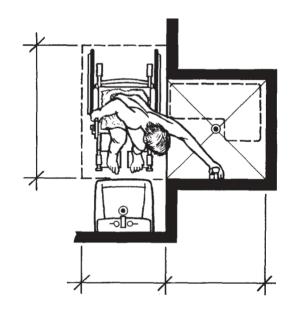
In both Specification A and B bathrooms, no other fixture may overlap the clear floor space at showers when the shower is only 36 inches long. In this illustration, the user leans forward to transfer from the wheelchair to the shower seat and may hit their head on the lavatory.

The portion of the lavatory that overlaps the clear floor space must have knee space below or a removable vanity cabinet. Thirty-six inches of the stall entrance must always remain clear for maneuvering and transfers. These limitations ensure that if a wall-mounted transfer seat or a free-standing shower bench or stool is placed in the shower, sufficient space to make a transfer is available.

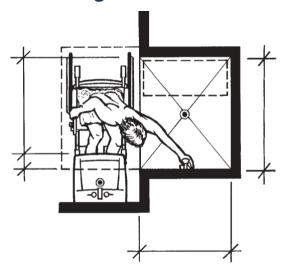
In this example, you see that the 48-inch clear floor space has not been overlapped allowing the user to lean forward without potentially hitting

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their head. The clear floor space is offset so that the user can position the wheelchair to make a safe transfer. The front face of the vanity or wall-hung lavatory is in line with the control wall.



Clear Floor Space – Showers – Fixture Overlap – 42 inches long



Notes:

However, if the shower is 42 inches long and a lavatory is mounted on the control wall beside the shower, it may overlap the clear floor space by six inches. The portion of the lavatory that overlaps the clear floor space must have knee space below or a removable vanity cabinet.

Thirty-six inches of the stall entrance must always remain clear for maneuvering and transfers. These limitations ensure that if a wall-mounted transfer seat or a free-standing shower bench or stool is placed in the shower, sufficient space to make a transfer is available.

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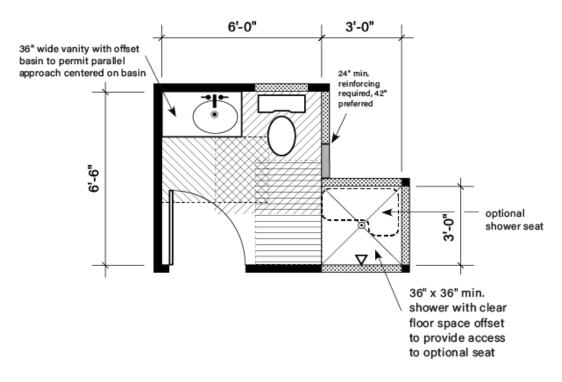
Clear Floor Space – Shower as Only Bathing Fixture

In both Specification A and B bathrooms, when a stall shower is the only bathing fixture in the covered dwelling unit it must be at least 36 inches x 36 inches in size.

This also applies to any planned bathrooms on the primary entry level of covered multistory dwelling units in buildings with one or more elevators. Shower stalls of larger sizes and configurations are permitted, even when the shower stall is the only bathing fixture in the covered unit.

Clear Floor Space - Shower as Only Bathing Fixture - Specification A

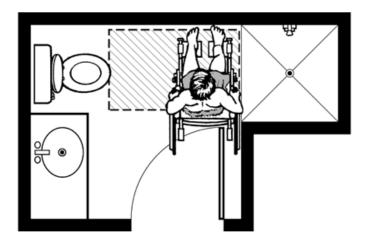
While reinforced walls for later installation of grab bars is required in all bathrooms, **Specification A** bathrooms do not require reinforcing to support a wall-mounted shower seat in the stall. However, it is strongly recommended that appropriate reinforcing for shower seats be installed in Specification A bathrooms.

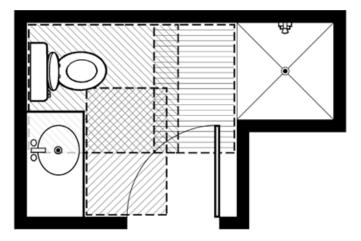


Notes:			

Clear Floor Space - Shower as Only Bathing Fixture - Specification B

In Specification B bathrooms, however, in addition to the reinforcing required for grab bars, **the shower stall must have reinforcing to allow for later installation** of an optional wall-mounted seat in a shower stall measuring a nominal 36 inches square. By adding this requirement in the Guidelines are setting the framework for a shower that could evolve into the ANSI accessible 36-inch by 36-inch transfer shower.



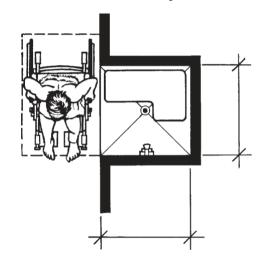


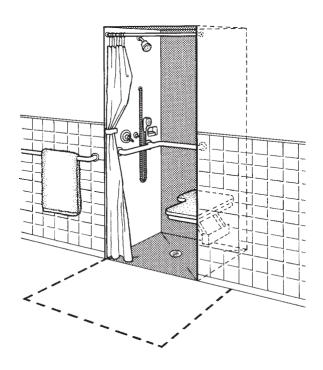
Notes:			

Clear Floor Space - Shower as Only Bathing Fixture - Specification B - 36" by 36"

The 36-inch x 36-inch transfer shower with a low curb and L-shaped seat **is a versatile and successful bathing fixture** for people who use wheelchairs or have difficulty walking. If a seat is installed that can be folded up against the wall, an ambulatory user also can stand in the shower.

This illustration shows the primary features found in a transfer shower. The 30-inch x 48-inch clear floor space beside the shower provides access to the control wall, and because it extends beyond the back of the stall, it allows a person using a wheelchair to position his or her chair in line with the wall-hung seat to make a safe sliding transfer.





Notes:

Clear Floor Space – Shower as Only Bathing Fixture – Specification B – Shower Seat

Reinforcing for a shower seat is not required in stalls of larger sizes, e.g., 30 inches x 60 inches because the stall is so long that the user is not able to reach the controls from a seat at the opposite end of the stall.

However, it is recommended that reinforcing be installed in stalls of different configurations and that thought be given to placing controls within reach of this potential seat as well as from outside the stall.

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Topic 6: Key Takeaways

Notes.

- A 30-inch by 48-inch clear floor space must be provided at shower stalls, parallel to
 the fixture and flush with the control wall. The Guidelines require this clear floor
 space beside the shower fixture primarily to ensure that adequate maneuvering
 space is available outside the stall for a person using a mobility aid to get sufficiently
 close to enter and exit the stall safely.
- In both Specification A and B bathrooms, no other fixture may overlap the clear floor space at showers when the shower is only 36 inches long. If the shower is 42 inches long and a lavatory is mounted on the control wall beside the shower, it may overlap the clear floor space by six inches.
- Specification A bathrooms do not require reinforcing to support a wall-mounted shower seat in the stall. However, it is strongly recommended that appropriate reinforcing for shower seats be installed in Specification A bathrooms.
- In Specification B bathrooms, however, in addition to the reinforcing required for grab bars, the shower stall must have reinforcing to allow for later installation of an optional wall-mounted seat in a shower stall measuring a nominal 36 inches square.



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Contacts

The Fair Housing Accessibility FIRST program provides a Design and Construction Resource Center, also
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the DCRC toll-free at 888-341-7781.

Or you can reach the DCRC at FairHousingFirst@hud.gov.

You can also subscribe via	the website for u	pdates from the Fair	Housing Accessibilit	y FIRST program.
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